DOCUMENT RESUME

ED 254 284 JC 850 092

AUTHOR Webster, Harold J.
TITLE Use of Videorecording Equipment as an Educational Tool.
PUB DATE [84]
NOTE 8p.
PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Class Activities; Community Colleges; *Educational Technology; Instructional Innovation; *Teaching Methods; *Videotape Recordings

ABSTRACT

The faculty at the DuBois Campus of the Pennsylvania State University are using video recording equipment in a variety of ways. Student performances are videotaped for different purposes in speech, marketing, and physical education classes. Professors in the Wildlife Technology Program are using portable videotaping equipment to record activities that occur at times and locations that prohibit students from viewing them. Factors which have affected the use of videotaping at the college include the location of equipment, faculty access, scheduling, the availability of a media specialist or audiovisual technician, the quality and availability of facilities (e.g., the sound studio and editing room), the training and experience of faculty, the quality of equipment, the availability of time to develop videotapes, and financial and administrative support for production. With acceptance by faculty and training in its use, the advantages of videorecording as an educational tool can outweigh logistical difficulties and can enhance the educational process. (LAL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED254284

USE OF VIDEORECORDING EQUIPMENT AS AN EDUCATIONAL TOOL

Harold J. Webster
DuBois Campus
The Pennsylvania State University
DuBois, Pennsylvania

JC 850 092

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

H. J. Webster

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☒ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

USE OF VIDEORECORDING EQUIPMENT AS AN EDUCATIONAL TOOL

Harold J. Webster

DuBois Campus

The Pennsylvania State University

DuBois, PA 15801

Videorecording equipment has become more affordable for smaller institutions, easier to operate, and more flexible than earlier equipment (Hoglin 1982). Increasingly, faculty are willing to adopt the use of videorecording equipment. This paper describes ways that faculty at the DuBois Campus of The Pennsylvania State University are using videorecording equipment.

Television can be as effective or more effective than traditional instructional methods (Chu and Schramm 1968). By extrapolation, videorecording equipment should also be an effective educational tool. Lawrason (1975) makes a case for videotape as a different medium from television, particularly because instructors have the opportunity to create their own videotapes and to control the learning process to a greater degree. The immediate playback feature of videotapes facilitates its use for evaluative purposes and for learning experiences.

Fuller and Manning (1973) found video playback could be either harmful or beneficial, depending on circumstances. Self-confrontation (viewing oneself) can be detrimental if the viewers are apprehensive of their abilities or have objections to the use of videotapes. In contrast, self-confrontation is more likely to be beneficial if a counselor directs the playback and controls the

analysis. A willing attitude is essential for the successful adoption of videorecording techniques (Knowlton and Howes 1962).

Videotapes have been used extensively in the training and evaluation of teachers and in measuring instructional effectiveness (Ellet and Smith 1975, Dawson et al 1975, Biberstine 1971). The evaluation of college teaching has many perspectives as Eble (1970) points out. The distinction between summative and formative evaluations needs clarification. Administrators utilize summative evaluations for promotion and tenure decisions. Although Centra (1977) and suggests videotapes can be used for summative evaluations, they are not currently used for this purpose at the DuBois Campus. In contrast, formative evaluations are designed to improve instruction (Abraham and Ost 1978, Cohen and McKeachie 1980). Parlett et al (1977) provide one scenario where a small group of colleagues worked cooperatively. Bakker and Lacey (1980) describe the use of a faculty consultant at Earlham College where formative evaluation is administratively sanctioned and supported. To date, formative evaluations at the DuBois Campus have been informal, almost casual, where a few teachers have viewed selective tapes in a non-structured format. A more formalized effort is likely to result in the near future. Interested faculty are consulting the procedures and instruments provided in Bergquist and Phillips (1975-1981) and Centra (1979) in order to pursue their efforts for self- and shared evaluation.

Recording lectures for student review is an obvious use of videorecording equipment. However, videotaped lectures are often for the convenience of the instructor, providing opportunities to

perform research or attend meetings. Prerecording of lectures is done sporadically at the DuBois Campus, but might be expected to increase as more faculty adopt the use of video equipment.

Another use of videotapes involves the recording and playback of oral presentations by students. Although studies differ regarding the effectiveness of this technique, the incorporation of precautions will allow the use of videotapes to be worthwhile and rewarding. Negative effects resulted when speaker-oriented evaluations were employed while positive impact resulted when audience-focused playbacks were used to emphasize the communication process (McCroskey and Lashbrook 1970). Hirschfeld (1968) recommended class evaluations of playbacks to squelch negative perceptions that tend to result when speakers view themselves for the first time.

Mr. Larry Albert, Instructor of Speech Communication, has used the videorecording equipment in a limited manner in Speech Communication 100: Effective Speech. Students were given the option to be videotaped or not. Evaluations (grades) were based on the live presentations, not the videotape playbacks. The analysis of the videotapes emphasized the communication process with an effort to de-emphasize personal characteristics and mannerisms. For the students who participated in the exercise, the experience was judged beneficial

Miss Betty Heohn, Instructor in Management Information Systems, videotaped sales presentations in Marketing 220: Personal Selling. In this case, the class critiqued the presentations as a group emphasizing the positive features. In these

two examples, the purpose was not to test the effectiveness of videotape, but to use videotaping as an adjunct to the traditional instuctional process.

Mr. Charles Gunderman, Assistant Professor of Physical Education, has adopted the use of videotaping for the purpose of judging technical progress in Physical Education 7: Beginning Golf. The videotaping of initial and final performances allows Mr. Gunderman to have a direct objective measure of relative improvement for each student. In addition, Mr. Gunderman can use the playback on an individual basis to point out specific areas that require technical improvement. In this situation the videotape has been a powerful teaching tool as well as improving the consistency of evaluation (grading).

Portable videotaping equipment can bring the field experience and laboratory demonstrations into the classrom. Dr. Harold Webster, Assistant Professor of Biology, is working with professors in the Wildlife Technology Program on videotaping field techniques. For example, Dr. Glenn Hughes, Assistant Professor of Wildlife Technology, uses controlled burning as a vegetation management tool. A videotape of a burn can capture the activity more effectively than 35 mm slides. Other possibilities include capture and relocation of problem bears, stream shocking for fish censusing, and radiotelemetry studies. Frequently these activities occur at times or locations that prohibit students from viewing them on field trips.

Logistical and technical problems need to be addressed. To the extent that the following list acts as deterrants to the use

of videotaping varies with individuals, the intended use, and the facilities available at each institution. The list below includes factors encountered in the first year of using the current equipment at the DuBois Campus.

1. Location of equipment and faculty access (scheduling)
2. Availability of a media specialist or audiovisual technician
3. Quality of facilities (sound studio, editing room) and availability of facilities
4. Training and experience of faculty
5. Quality of equipment
6. Time available to develop videotapes
7. Financial and administrative support for production.

In summary, technological innovation requires acceptance by the faculty and training in its use. Problems related to the ease of use can act as deterrants and can inhibit the adoption of videotape techniques. However, the perceived and demonstrated advantages of videorecording equipment as an educational tool can outweigh logistical difficulties and can enhance the educational process.

LITERATURE CITED

Abraham, M. R. and D. H. Ost. 1978. Improving Teaching Through Formative Evaluation. Journal of College Science Teaching 7:227-229.

Bakker, G. R. and P. A. Lacey. 1980. The Teaching Consultant at Earlham. In: W. C. Nelson and M. E. Siegel (eds.). Effective Approaches to Faculty Development. Washington, D. C.; Association of American Colleges

Bergquist, W. H. and S. R. Phillips. 1975-1981. A Handbook for Faculty Development. 3 vols. Washington, D. c.; The Council of Independent Colleges.

Biberstine, R. D. 1971. The Utilization of Videotape Equipment in Teacher Education. Contemporary Education 42:217-221.

Centra, J. A. 1977. The How and Why of Evaluating Teaching. pp. 93-106. In: J. A. Centra (ed.). Renewing and Evaluating Teaching. San Francisco; Jossey-Bass Inc., Publishers.

Centra, J. A. 1979. Determining Faculty Effectivenes. San Francisco; Jossey-Bass, Inc., Publishers.

Chu, G. C. and W. Schramm. 1968. Learning from Television: What the Research Says. Washington, D. C., National Association of Educational Broadcasters.

Cohen, P. A. and W. J. McKeachie. 1980. The Role of Colleagues in the Evaluation of College Teaching. Improving College and and University Teaching 28:147-154.

Dawson, P. J., K. E. Dawson, and S. R. Forness. 1975. Effect of Video Feedback on Teacher Behavior. The Journal of Educational Research 68:197-201.

Eble, K. E. 1970. The Recognition and Evaluation of Teaching. Salt Lake City, Utah; Project to Improve College Teaching.

Ellett, L. E. and E. P. Smith. 1975. Improving Performance of Classroom Teachers Through Videotaping and Self-Evaluation. Audiovisual Communication Review 23:277-288.

Fuller, F. F. and B. A. Manning. 1973. Self-confrontation Reviewed: A Conceptualization for Video Playback in Teacher Education. Review of Educational Research 43:469-528.

Hirschfeld, A. G. 1968. Videotape Recordings for Self-analysis In the Speech Classroom. The Speech Teacher 17:116-118.

Hoglin, J. G. 1982. How to Use Low-Cost Video for Instruction. Audiovisual Instruction 27:39-40, 43.

Knowlton, J. and E. Howes. 1962. Attitude: Helpful Predictor of Audiovisual Usage? Audiovisual Communication Review 10:147-157.

Lawrason, R. E. 1975. Videotape Versus Television in the Learning Process. International Journal of Instructional Media 2:151-161.

McCroskey, J. C. and W. B. Lashbrook. 1970. The Effect of Various Methods of Employing Video-Taped Television Playback in a Course in Public Speaking. The Speech Teacher 19:199-205.

Parlett, M., D. Hershiser, M. Jamieson, and K. Pocklington. 1977. Small Scale Study of Video Group Feedback. pp. 302-306. In: S. C. Schall and S. C. Inglis (eds.). Teaching in Higher Education: Readings for Faculty. Columbus, Ohio; Ohio Board of Regents.

ERIC Clearinghouse for Junior Colleges
8118 Math-Sciences Building
University of California
Los Angeles, California 90024

APR 5 1985